# NUCLEAR EMERGENCY MODELLING AT THE NORWEGIAN METEOROLOGICAL INSTITUTE

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Since the famous and tragic Chernobyl accident in 1986 there has been an effort for developing operational dispersion models capable to forecast the movement of the radioactive cloud for several days after potential accident. Severe Nuclear Accident Program (SNAP) model has been developed in Norway for this purpose and became operational already in 1995. Since that time SNAP has been continuously improved and developed in close collaboration with the Norwegian Radiation Protection Authority (NRPA), who is the main model user both in case of a real threat and for the exercises. Today, SNAP can be used in two ways. First, the authorised personnel of NRPA can start the model remotely by submitting the input file to SNAP server at met.no. After the model run is finished the results are immediately sent back to NRPA and analysed using the ARGOS system. The second way is the action of a meteorologist on duty who can start the model and then analyse and send the results to those who are on the receiver list. In both ways the system is operational 24 hours a day. SNAP has proved to be fast, efficient and robust over the years. Therefore, in the paper we would like to present it together with some new applications developed in 2010, and share our experience with other potential users, those who already have such a model and especially with those who are developing it or plan to develop it.